## **REMARKS**

By this amendment, claims 1, 8, 22, and 27 have been amended in accordance with the agreements reached during the personal interview of January 27, 2005, summarized below (the language of claim 22 has been slightly modified upon further review, but it is believed that it is substantially as agreed). In addition, the specification has been amended in accordance with the discussions in the interview, and to conform to the claim amendments. These claim amendments clarify and express limitations that were already implicitly present in the claims. Accordingly, the claim amendments are not narrowing amendments. Thus, claims 1-35 remain pending in the application, of which claims 1, 8, 22, and 27 are independent claims.

Applicant appreciates the indication that claim 6 contains allowable subject matter, however, in view of the above Amendments and the following Remarks, Applicant believes that all claims are allowable. Accordingly, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

## Interview Summary

First of all, Applicant thanks the Examiner for the courtesies extended to the Applicant's undersigned representative during the Interview of January 27, 2005. During the interview, agreement was reached that the specification and claims, as amended herein, were satisfactory to overcome the objections and rejections in the outstanding Office Action.

During the interview, Applicant discussed the cited references, *Bancroft* and *Croll*, as well as the product brochures and a sample prior art mouthguard made in accordance with *Bancroft*. Applicant explained that the *Bancroft* patent and prior art, commercial products made in accordance with *Bancroft* were designed to protect the posterior teeth of the wearer. It was

envisioned that orthodontics would aid in protecting the anterior teeth of the wearer. Applicant

also noted that any flexibility in the bite tab portion of Croll was achieved as a result of the

material used, not a specific structural element, as claimed herein. Indeed, the structures in Croll

(27, 33) identified by the Examiner as being allegedly readable upon a division merely permit the

Croll mouthguard to be shipped in separate pieces and then add rigidity by interlocking the two

pieces together.

Applicant then demonstrated how sample mouthguards made in accordance with the

principles of this invention provided protection for the anterior teeth, while at the same time

accommodating different mouth sizes and retaining the comfort, fit and flexibility features of Dr.

Bancroft's prior patented invention.

Applicant also discussed the support in the application for each claim phrase to which the

Examiner initially objected. Applicant showed the Examiner portions of the specification

drawings and/or claims as originally filed that support each of these phrases, as discussed herein.

Applicant also provided proposed changes to the specification and figures to help clarify the

support for the phrases found in claim 27 and its dependent claims.

Applicant then discussed the rejections of the claims in view of Bancroft and Croll.

Using the arguments discussed herein, Applicant distinguished the claims from the prior art. In

some cases the Applicant proposed amendments to the claims to clarify or express limitations

that were implicitly present. In view of the arguments and proposed amendments, the Examiner

agreed that all the specification and claim objections were overcome and the claims were

allowable over the art of record.

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Specification Objections

In the Office Action, the specification generally was objected to as having no support for

"a plurality of divisions in the bite tab dividing the bite tab into three sections, the thickness of

the anterior section of the first bite tab portion being different than the thickness of the posterior

section of the first bite tab portion, the anterior and posterior sections of the first bite tab portion

having substantially the same thickness, the front and the rear surfaces of the frame having a

transition separating one surface into first and second portions that are offset from each other,

wherein the first portion extends outwardly further than the second portion, the transition

including a shoulder and the transition disposed in an outwardly facing front surface."

As discussed in the Interview, there is support for each of the cited phrases in the

specification, claims and/or drawings as originally filed.

The phrase "a plurality of divisions in the bite tab dividing the bite tab into three

sections" is supported by at least original claim 10 and p. 4, 11. 11-12 of the specification

("Multiple divisions may be provided in the anterior and/or posterior portions of the bite tab

sections.").

The phrases "the thickness of the anterior section of the first bite tab portion being

different than the thickness of the posterior section of the first bite tab portion" and "the anterior

and posterior sections of the first bite tab portion having substantially the same thickness" are

supported by at least original claims 5 and 6 and p. 6, 1l. 1-5 of the specification ("The posterior

and anterior portions of each inwardly projecting element are illustrated as having the same

thickness (for instance, approximately 4.25 mm. thick). However, the thickness of each portion

can vary. The anterior portion of each inwardly projecting element could be thinner than the

corresponding posterior portion, or vice-versa.").

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The phrase "the front and the rear surfaces of the frame having a transition separating one

surface into first and second portions that are offset from each other, wherein the first portion

extends outwardly further than the second portion, the transition including a shoulder and the

transition disposed in an outwardly facing front surface" is supported by the original drawing

Figs. 4 and 5, as made clear by the new reference numerals (201, 202, 203, 204) added in the

replacement drawing sheet and the specification amendments.

Accordingly, Applicant respectfully requests withdrawal of the objection to the

specification.

Claim Objections

In the Office Action, Claims 10-11, 14-15, 20, and 27-31 were objected to as lacking

support in the specification for the "structural limitations recited in [those] claims." Office

Action, p. 2. Applicant respectfully traverses this objection.

During the Interview, the Examiner explained that the claim objections (except for one

objection to Claim 27 discussed below) were based upon the specification objections. As such,

they have been addressed and are now moot in light of the discussion above.

Claim 27 was also objected to as positively reciting "the first bite tab portion having a

proximal side adjacent the rear surface of the frame member" more than once. Claim 27 has

been amended to fix this typographic error. In particular the second instance of the phrase

quoted above has been modified to indicate a reference to the second bite tab portion as opposed

to the first bite tab portion.

Accordingly, Applicant respectfully requests withdrawal of the objections to claims 10-

11, 14-15, 20, and 27-31.

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Rejections Under 35 U.S.C. §102 in view of U.S. Patent No. 5,445,168

Claims 1-5, 7-8, 12-13, 16-19, 21-24, and 26 stand rejected under 35 U.S.C. §102(b) as

being anticipated by U.S. Patent No. 5,445,168 issued to Bancroft ("Bancroft"), which is the

Applicant's own previous U.S. patent. Applicant respectfully traverses this rejection for at least

the following reasons.

With regard to claim 1, the claim language includes the recitation of a combination of

elements not disclosed or suggested in Bancroft or any of the art of record including "a bite tab

... engageable with at least one of wearer's anterior teeth." With regard to claim 8, the claim

language includes the recitation of a combination of elements not disclosed or suggested in

Bancroft or any of the art of record including "said bite tab ... positioned to engage at least a

portion of the front teeth." The cited reference, Bancroft, does not teach either of these

limitations. In contrast Bancroft teaches a mouthguard in which the bite tabs are adapted to

"provide protection to ... posterior teeth." Bancroft, Col. 2, Il. 35-36; see also, Bancroft, Col. 3,

11. 23-25. Posterior teeth and anterior teeth are not the same, thus at least this element is not

taught by the cited reference. Accordingly, because not all of the elements of the claim are

taught, the reference does not anticipate the claim.

Additionally, claim 1 has been amended to clarify the above limitation and obviate the

need to rely upon interaction of the mouthguard with a portion of the human anatomy to

distinguish over the prior art. Thus, the bite tab is now described as "extending along a

substantial portion of said longitudinal extent of the flexibility" because it is believed that this

language helps to clarify what is meant by "a bite tab ... engageable with at least one of wearer's

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anterior teeth and one of the wearer's posterior teeth." Accordingly no new limitation has been added.

With regard to claim 22, the claim language includes the recitation of a combination of elements not disclosed or suggested in *Bancroft* or any of the art of record including "means for engaging at least some of ... the anterior ... teeth." This limitation reads on the structures disclosed in the specification (and equivalents) that perform the stated function. In contrast *Bancroft* teaches a mouthguard in which the bite tabs are adapted to "provide protection to ... posterior teeth." *Bancroft*, Col. 2, Il. 35-36; see also, *Bancroft*, Col. 3, Il. 23-25. Thus, *Bancroft* does not provide structure to accomplish the recited function. Accordingly, because not all of the elements of the claim are taught, the reference does not anticipate the claim.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejection of claims 1-5, 7-8, 12-13, 16-19, 21-24, and 26. Since none of the other prior art of record discloses or suggests all the features of the claimed invention, Applicant respectfully submits that independent claims 1, 8 and 22, and all the claims that depend from them are allowable.

## Rejections Under 35 U.S.C. §102 in view of U.S. Patent No. 5,692,523

Claims 8-31 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,692,523 issued to Croll, *et al.* ("*Croll*"). The Examiner alleges that T-shaped tab portion 27, which together with keyhole 25, positively joins members 11 and 5, and slots 33 into which member 11 fits, constitute divisions. Applicant respectfully traverses this rejection for at least the following reasons.

With regard to claim 8, the claim language includes the recitation of a combination of elements not disclosed or suggested in *Croll* or any of the art of record including "a division

separating said bite tab into sections and providing additional flexibility to the bite tab." The cited reference, *Croll*, does not teach at least this element. In *Croll*, T-shaped tabs portion 27 does not divide the bite tab into sections. *See*, *for example*, *Croll*, Figure 5 (showing element 15 as a continuous, undivided piece). Moreover, even assuming *arguendum* that T-shaped tab 27 of *Croll* was a division, it does not increase the flexibility of the bite tabs. T-shaped tab 27 does not significantly affect the overall flexibility of the bite tabs. Tab 27 has the same material and thickness as the member 15 and remains in contact with member 15 after assembly (*See* Fig. 5)). The purpose of the tab 15 is to positively interlock the two members together. Generally, locking is something that decreases overall flexibility. Accordingly, the cited reference does not teach this element.

Moreover, claim 8 has been amended to clarify this limitation. Specifically, the claim has been amended to clarify what was previously intended by this limitation, namely that the flexibility in the bite tab is the kind "permitting spacing between said bite tab sections to change to accommodate different mouth sizes." Thus no new limitation has been added to the claim.

With regard to claim 22, the claim language includes the recitation of "means for adding flexibility to said ... engaging means." Although the Office Action does not explain why this element was anticipated, Applicant believes that this claim, which has been amended in a manner similar to claim 8, to clarify an existing limitation, distinguishes over the prior art of record for similar reasons.

With regard to claim 27 the claim language includes the recitation of a combination of features, including "a transition separating said one surface into first and second portions that are offset from each other such that the first portion extends outwardly further than the second portion." The cited portion of the *Croll* reference shows two portions that are not offset from

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each other. Instead the cited portions are coplanar within the curved plane of the frame member.

See, for example, Croll Fig. 1. Also, contrary to the invention recited in claim 27, Croll teaches

trimming his mouthguard using scissors. See Croll, col. 4, lines 45-47. Accordingly, the cited

reference is deficient as an anticipation reference for at least these reasons.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b)

rejection of claims 8-31. Since none of the other prior art of record discloses or suggests all the

features of the claimed invention, Applicant respectfully submits that independent claims 8, 22,

and 27, and all the claims that depend from them are allowable.

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**CONCLUSION** 

Applicant believes that a full and complete response has been made to the pending Office

Action and respectfully submits that all of the stated objections and grounds for rejection have

been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending

claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this

response, the Examiner is invited to contact the Applicant's undersigned representative at the

number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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